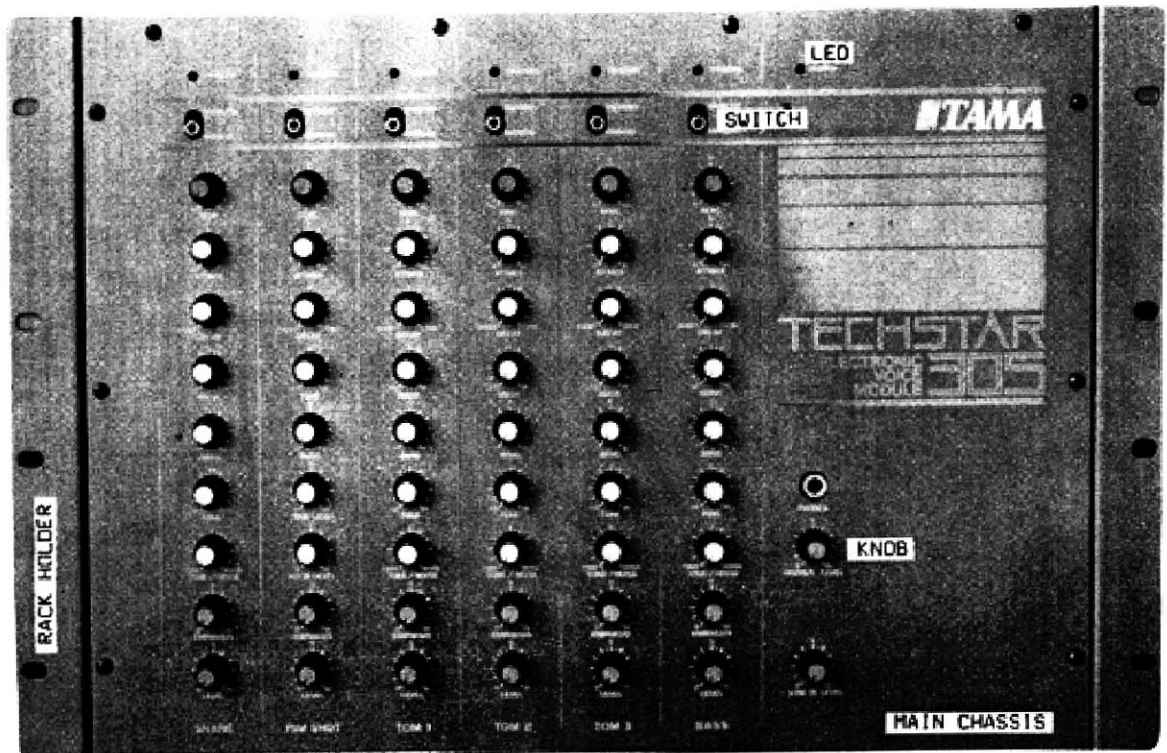


TAMA TS 305

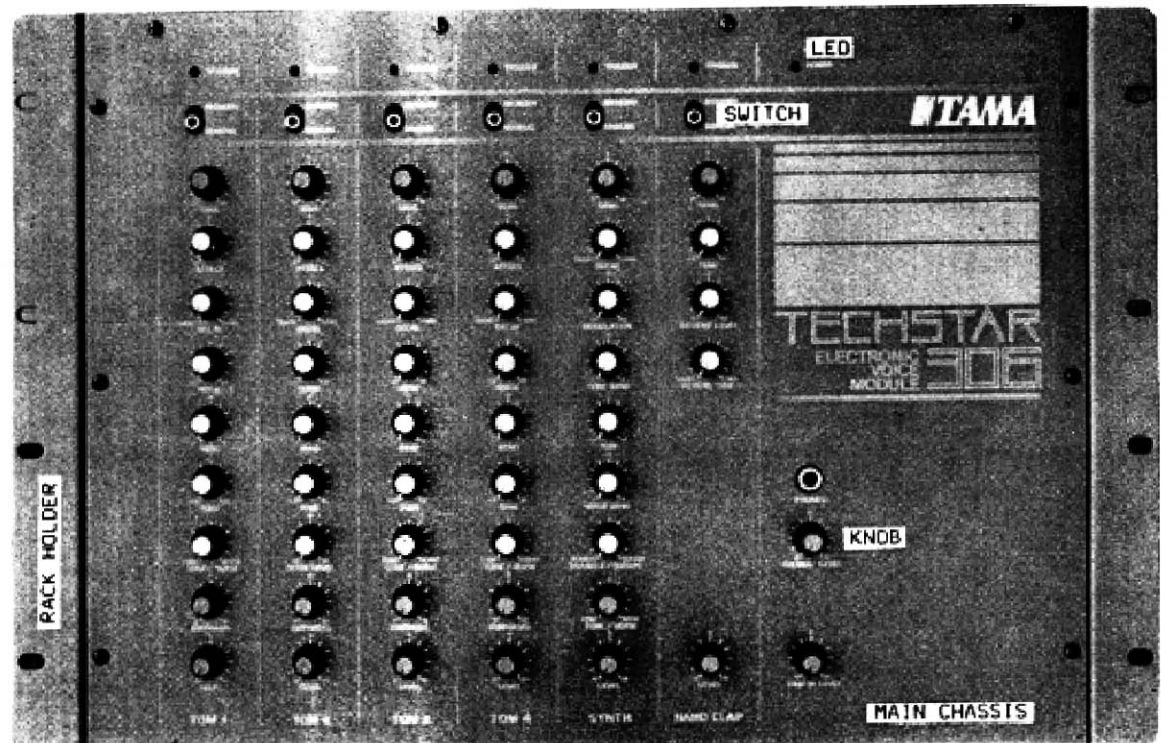
DISPOSITION OF PARTS

Parts Nos. are shown in PARTS LIST.

TS305



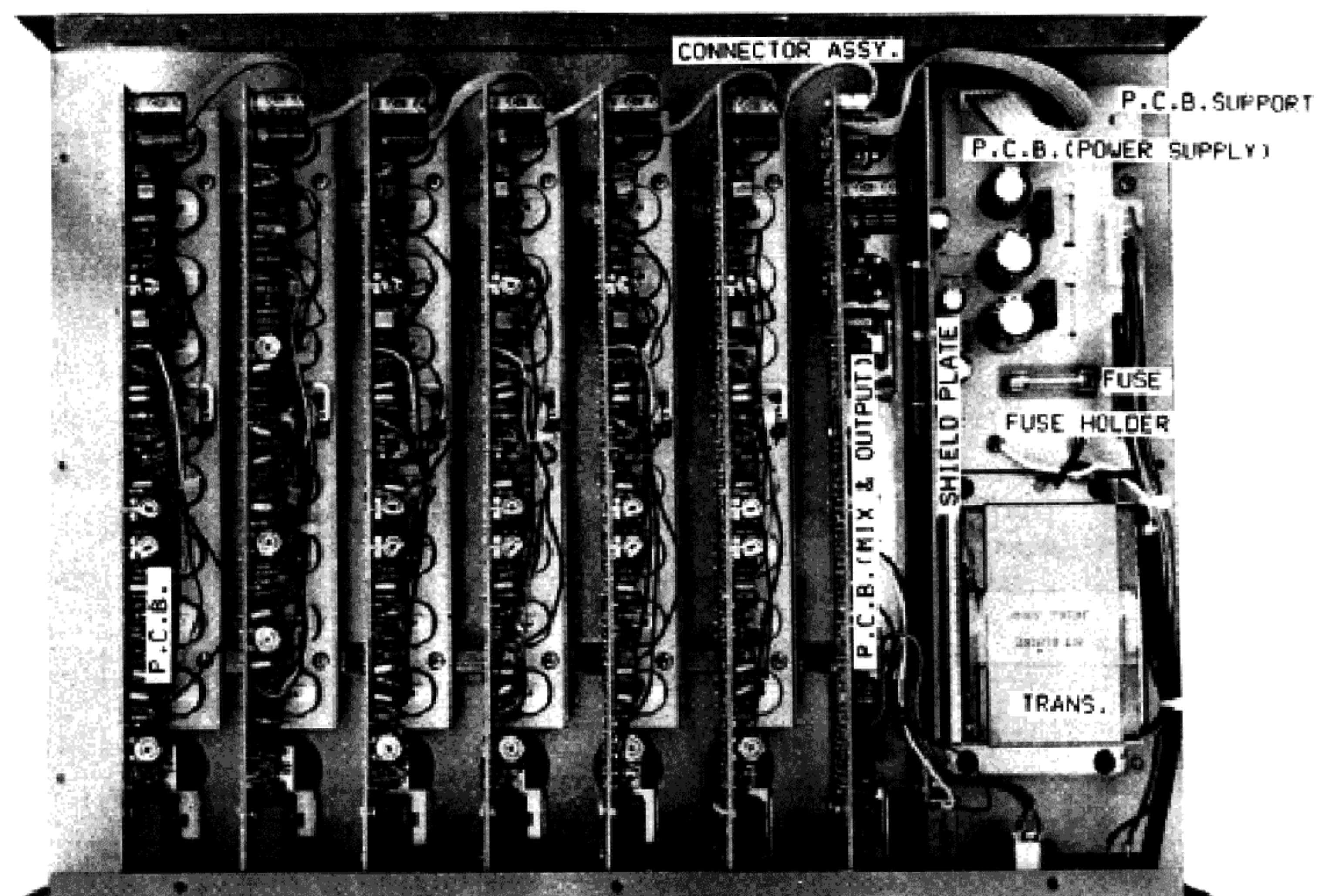
TS306



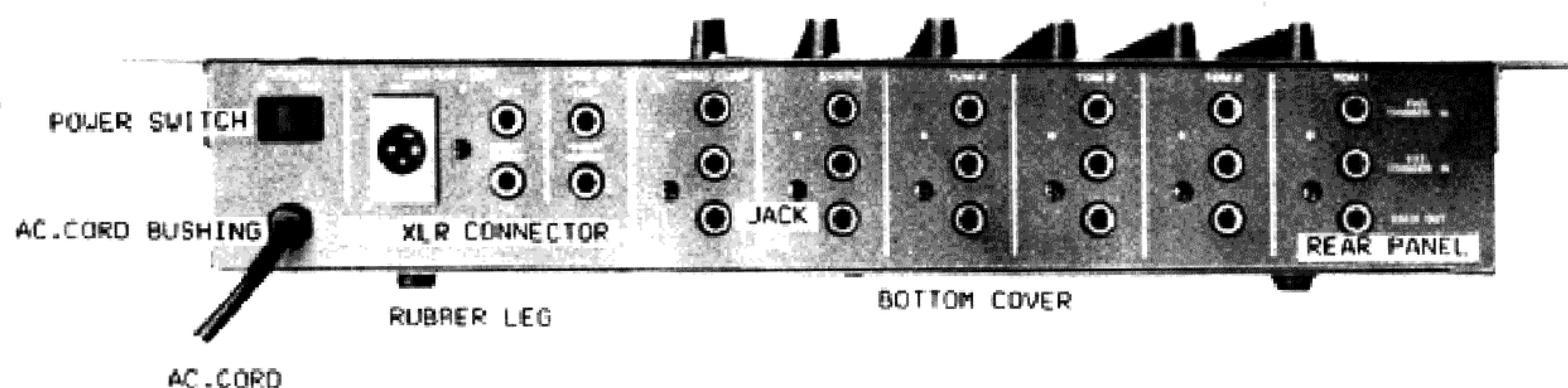
 * DISPOSITION OF PARTS *

Parts Nos. are shown in PARTS LIST.

TS305
 TS306



TS305
 TS306



EXT. TRIGGER IN
PAD IN
SENS
TRIGGER LED 1
TONE/NOISE
EACH OUT

IC1~8 : NJM4358D
IC9, 10 : NJM13800D
Q1~12 : 2SK2466R
Tr1~3 : 2SC1815BL
Tr4, 5 : 2SA1015GR
D1~16 : 1S1588
LED 1 : LN2SRP

CAUTION : This schematic diagram is a normal standard one.
The parts rating and/or schematic diagram will be
changed without notice.

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The parts rating and/or schematic diagram will be
changed without notice.

25C1815BL
25A1015GR

EMITTER
COLLECTOR
BASE

25K246GR

SOURCE
GATE
DRAIN

The image shows two pinout diagrams for comparators. The top diagram is for the NJM45580, a dual comparator, with a 14-pin package. It features two triangular op-amp symbols. The left side (pins 1-4) is for the first comparator: 1 is A OUTPUT, 2 is A-INPUT, 3 is A+INPUT, and 4 is V-. The right side (pins 5-8) is for the second comparator: 5 is B+INPUT, 6 is B-INPUT, 7 is B OUTPUT, and 8 is V+. The bottom diagram is for the NJM136000, a single comparator, with an 8-pin package. It features one triangular op-amp symbol. The left side (pins 1-4) is for the input: 1 is AMP BIAS INPUT, 2 is DIODE BIAS, 3 is INPUT (+), 4 is INPUT (-). The right side (pins 5-8) is for the output and power: 5 is OUTPUT, 6 is V-, 7 is BUFFER INPUT, and 8 is BUFFER OUTPUT.

NJM45580

1	A OUTPUT	8	V+
2	A-INPUT	7	B OUTPUT
3	A+INPUT	6	B-INPUT
4	V-	5	B+INPUT

NJM136000

1	AMP BIAS INPUT	5	OUTPUT
2	DIODE BIAS	6	V-
3	INPUT (+)	7	BUFFER INPUT
4	INPUT (-)	8	BUFFER OUTPUT

▲ : CERAMIC capacitor. All ceramic capacitors are above 25V rating.
■ : FILM capacitor. All film capacitors are above 50V rating.
NP : NON POLAR capacitor.
T : TANTALUM capacitor.

And all capacitors are ELECTROLYTIC capacitors, unless otherwise marked. Unless otherwise indicated:
Resistance in Ω , K= 10^3 , M= 10^6
Resistors, 1/4W or 1/8W, $\pm 5\%$ rating
Capacitance in P=PF, μ = μ F

CAPACITOR LIST

	C6	Cb	Cc	Cd	Co	Cf	Cg	Ch	Cl	C9	J
SNARE	393	562	J	203	103	103	562	562	562	—	—
TOM 1	183	103	J	103	103	103	—	—	—	0.47	J
TOM 2	183	103	J	273	123	123	—	—	—	0.47	J
TOM 3	183	103	J	333	153	153	—	—	—	0.47	J
BASS	183	103	J	333	153	153	—	—	—	—	J

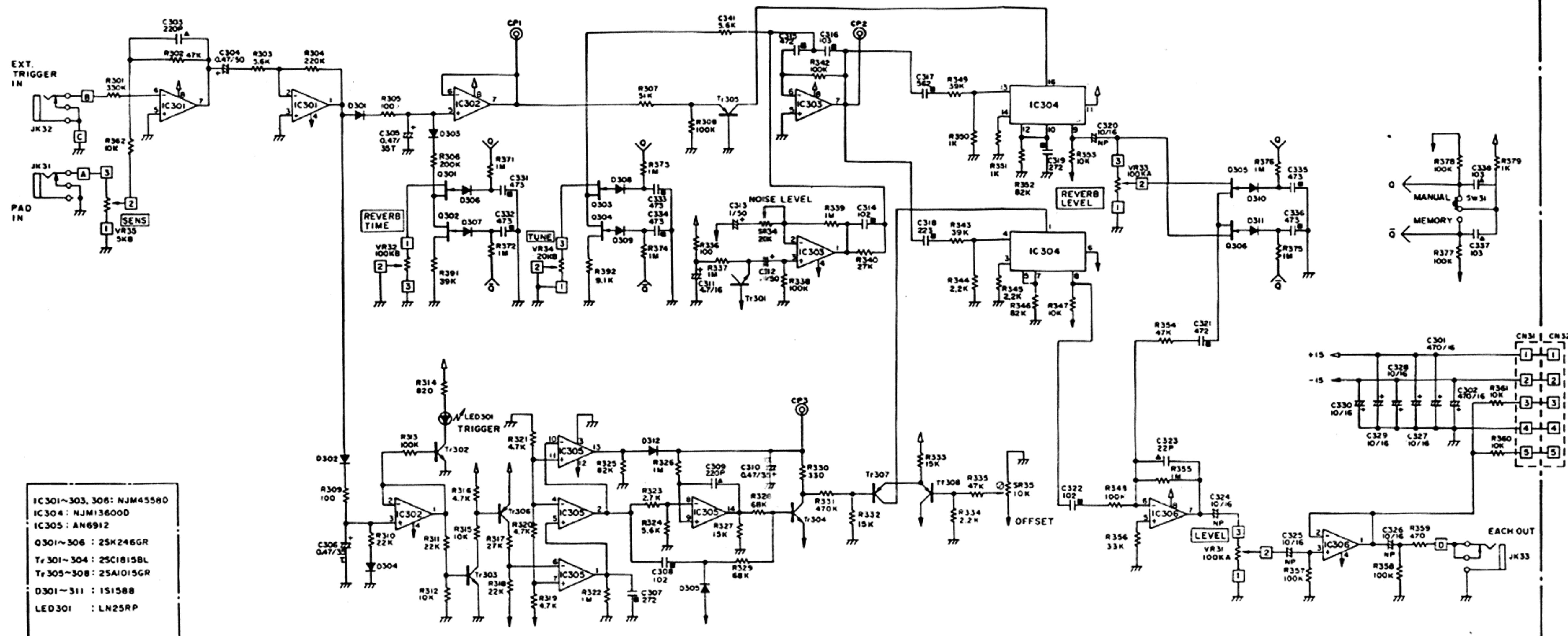
	Ro	Rb	Rc	Rd	Re	Rf	Rg	Rh	Ri	Rj	Rk	Rl	Rm	Rn	Rp	Rq
SNARE	1M	10K	1M	10K	10K	100K	100K	540K	10K	10K	100K	10K	10K	200K	1.3K	
TCM 1	1M	10K	1M	10K	10K	100K	100K	680K	—	—	—	10K	30K	300K	2.7K	
TCM 2	1M	10K	1M	10K	10K	100K	100K	1M	—	—	—	15K	10K	300K	2.7K	
TCM 3	1M	10K	1M	10K	10K	100K	100K	680K	—	—	—	39K	10K	300K	2.7K	
BRASS	1M	2.7K	1M	2.7K	10K	100K	100K	680K	—	—	—	10K	10K	300K	4.7K	

CAPACITOR LIST

	Ce	Cb	Cc	Cd	Ce	Cf	Cg	Ch	CI	CJ	JK
TOM 1	103	103	J	123	562	562	—	—	—	0.47	J
TOM 2	103	103	J	103	103	103	—	—	—	0.47	J
TOM 3	103	103	J	273	123	123	—	—	—	0.47	J
TOM 4	103	103	J	333	133	133	—	—	—	0.47	J

	Ra	Rb	Rc	Rd	Re	Rf	Rg	Rh	Ri	Rj	Rk	Rl	Rm	Rn	Rs	Rt
TOM 1	1M	10 K	1M	10 K	10 K	100 K	100 K	1M	—	—	—	10 K	91 K	300 K	2.7 K	—
TOM 2	1M	10 K	1M	10 K	10 K	100 K	100 K	680 K	—	—	—	10 K	30 K	300 K	2.7 K	—
TOM 3	1M	10 K	1M	10 K	10 K	100 K	100 K	1M	—	—	—	30 K	10 K	300 K	2.7 K	—
TOM 4	1M	2.7 K	1M	2.7 K	10 K	100 K	100 K	680 K	—	—	—	91 K	10 K	300 K	2.7 K	—

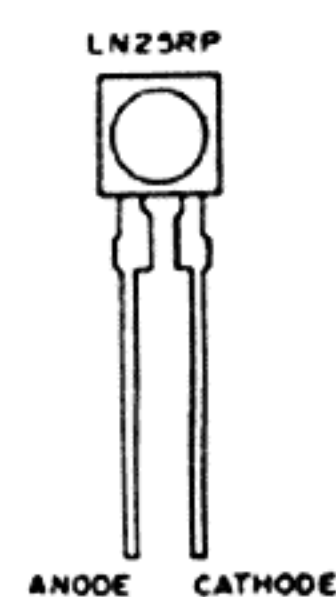
HAND CLAP MODULE



MP-TS0102A

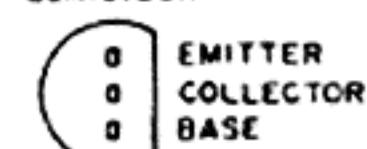
CAUTION: This schematic diagram is a normal standard one.
 The parts rating and/or schematic diagram will be
 changed without notice.

SIDE VIEW

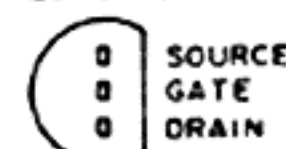


BOTTOM VIEW

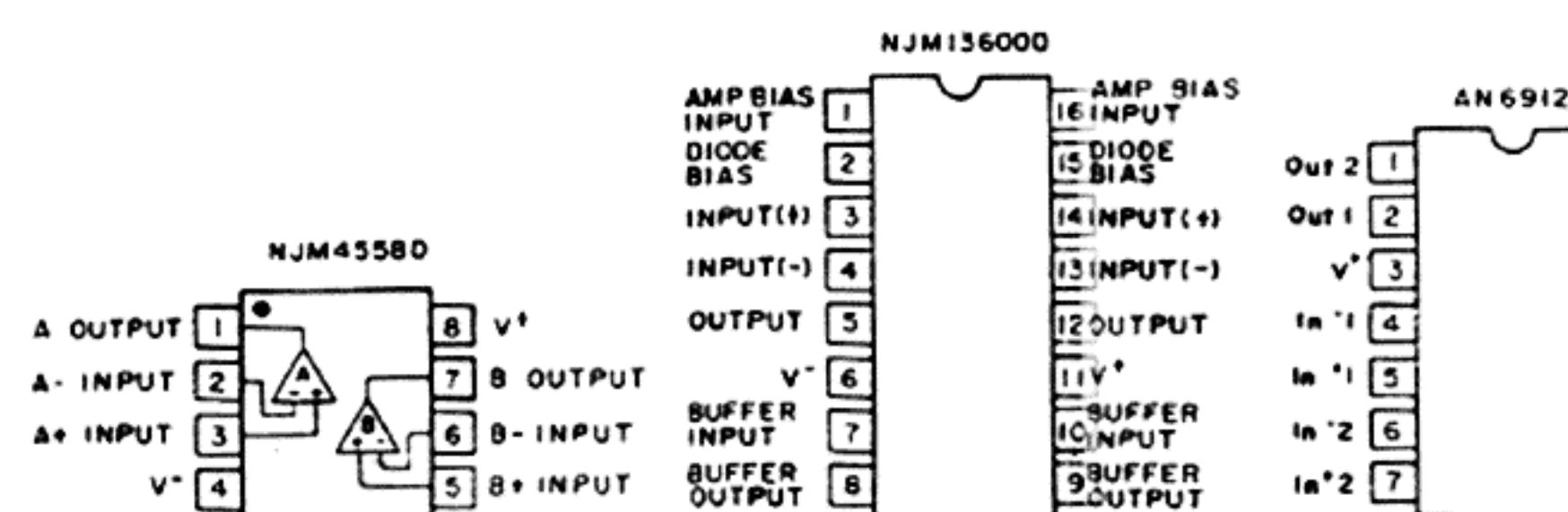
2SC1815BL
 2SA1015GR



2SK246GR



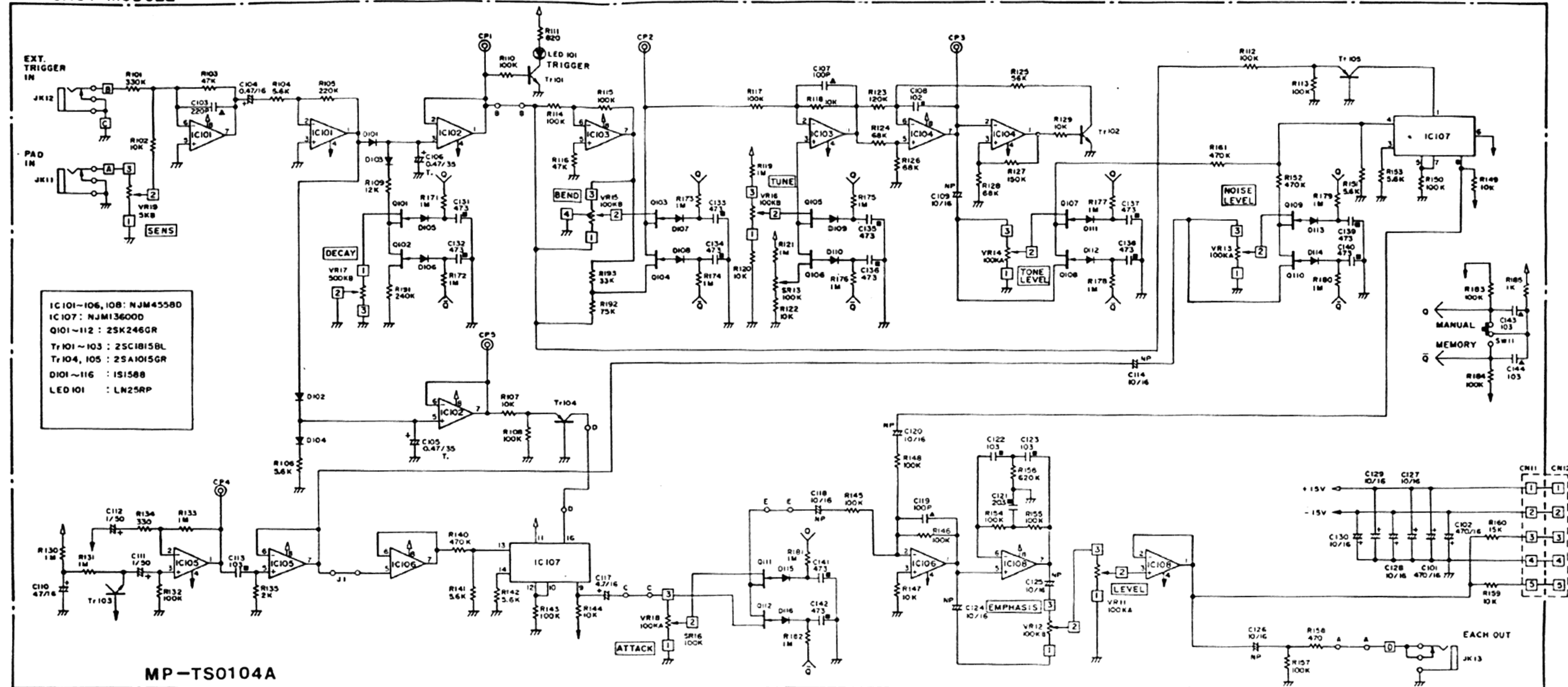
TOP VIEW



NOTES

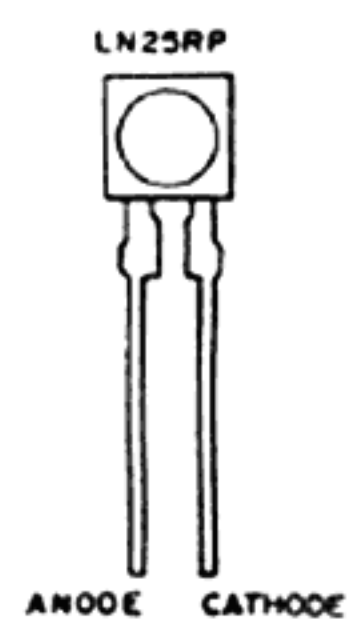
- ▲ CERAMIC capacitor. All ceramic capacitors are above 25V rating.
 - FILM capacitor. All film capacitors are above 50V rating.
 - NP: NON POLAR capacitor.
 - T: TANTALUM capacitor.
- And all capacitors are ELECTROLYTIC capacitors, unless otherwise marked.
 Unless otherwise indicated:
 Resistance in Ω , K= $K\Omega$, M= $M\Omega$
 Resistors, 1/4W or 1/8W, $\pm 5\%$ rating
 Capacitance in P=PF, $\mu=\mu F$

RIM SHOT MODULE



CAUTION: This schematic diagram is a normal standard one. The parts rating and/or schematic diagram will be changed without notice.

SIDE VIEW



BOTTOM VIEW

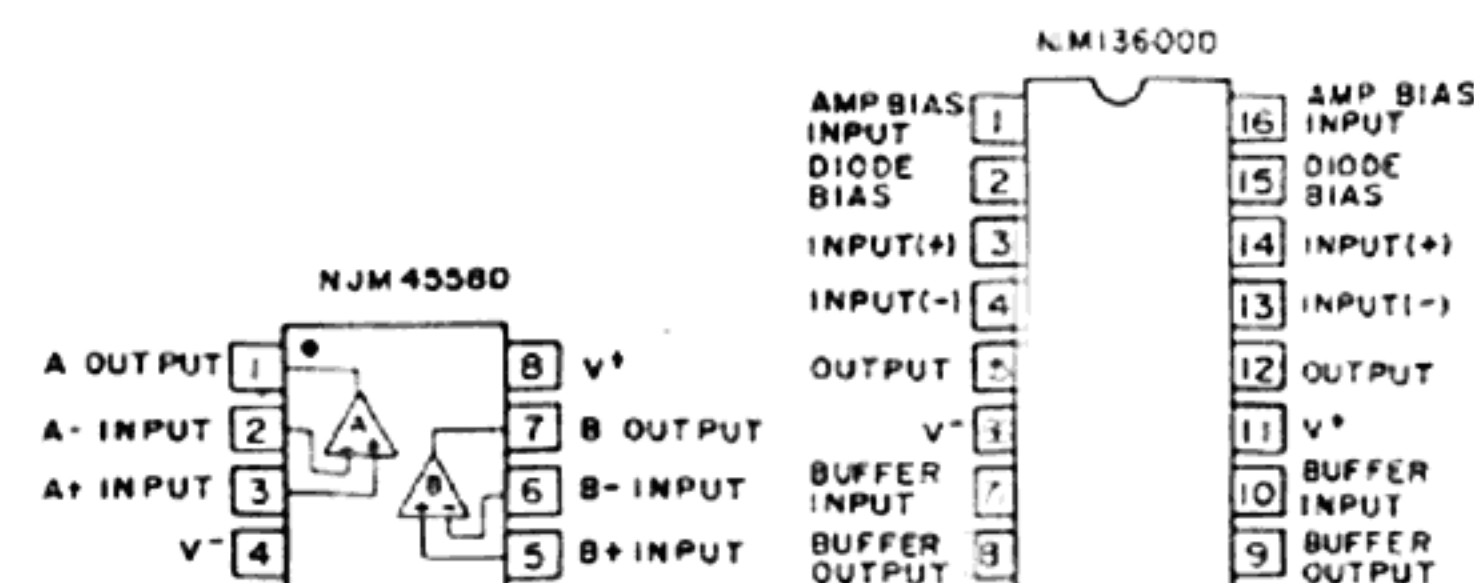
25C1815BL
25A1015GR



25K246GR



TOP VIEW



[NOTES]

- ▲ CERAMIC capacitor. All ceramic capacitors are above 25V rating.
- FILM capacitor. All film capacitors are above 50V rating.
- NP: NON POLAR capacitor.
- T: TANTALUM capacitor.

And all capacitors are ELECTROLYTIC capacitors, unless otherwise marked. Unless otherwise indicated: Resistance in Ω , K= 10^3 , M= 10^6 . Resistors, 1/4W or 1/8W, $\pm 5\%$ rating. Capacitance in P=PF, μ = μ F.

EXT. TRIGGER IN

PAD IN

DECAY

TUNE

MODULATION

TRIANGLE SQUARE

NOISE LEVEL

NOISE TONE

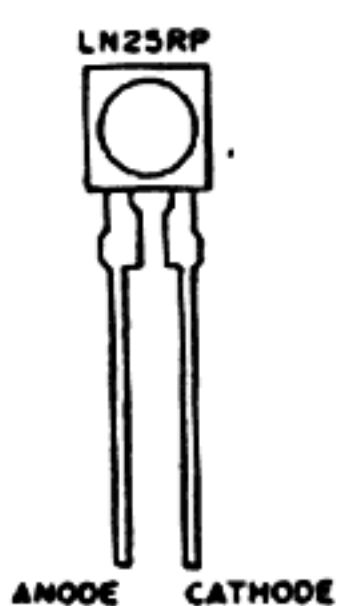
LEVEL

EACH OUT

MP-TS0103A

IC201~207 : NJM45580
 IC208, 209 : NJM136000
 Q201~214 : 2SK2466R
 Tr201~204 : 2SC1815BL
 Tr205 : 2SA10156R
 LED201 : LN25RP
 D201~216 : 1S1588

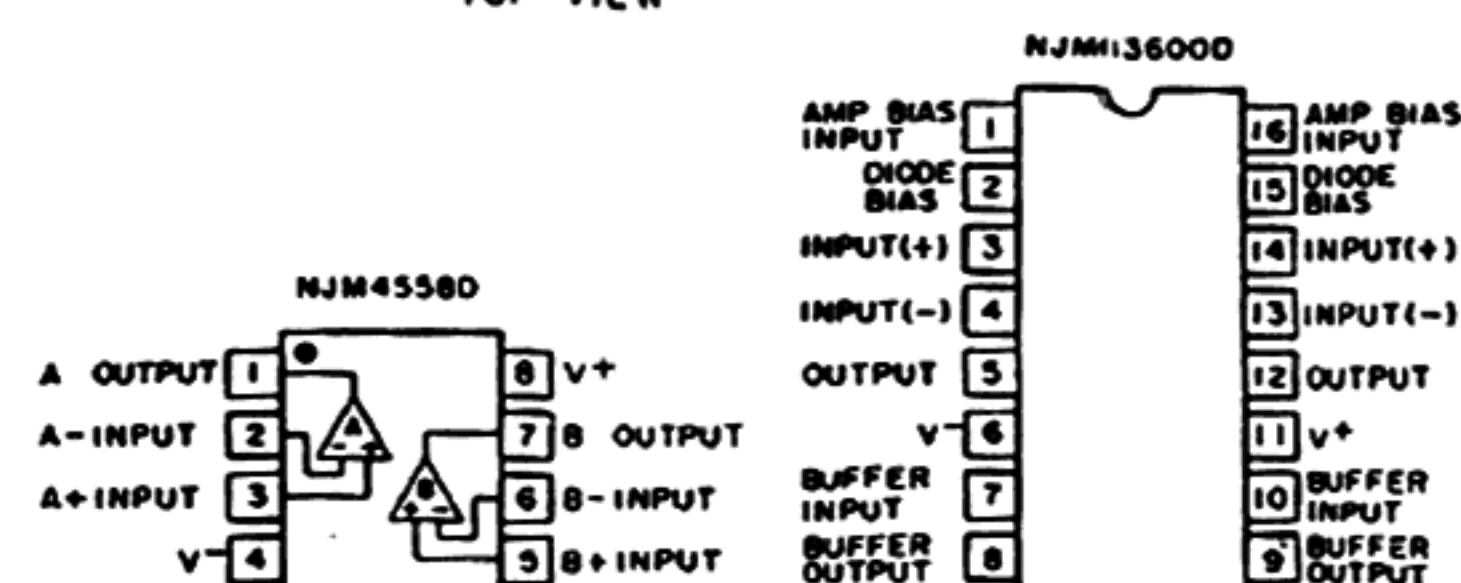
SIDE VIEW



BOTTOM VIEW



TOP VIEW

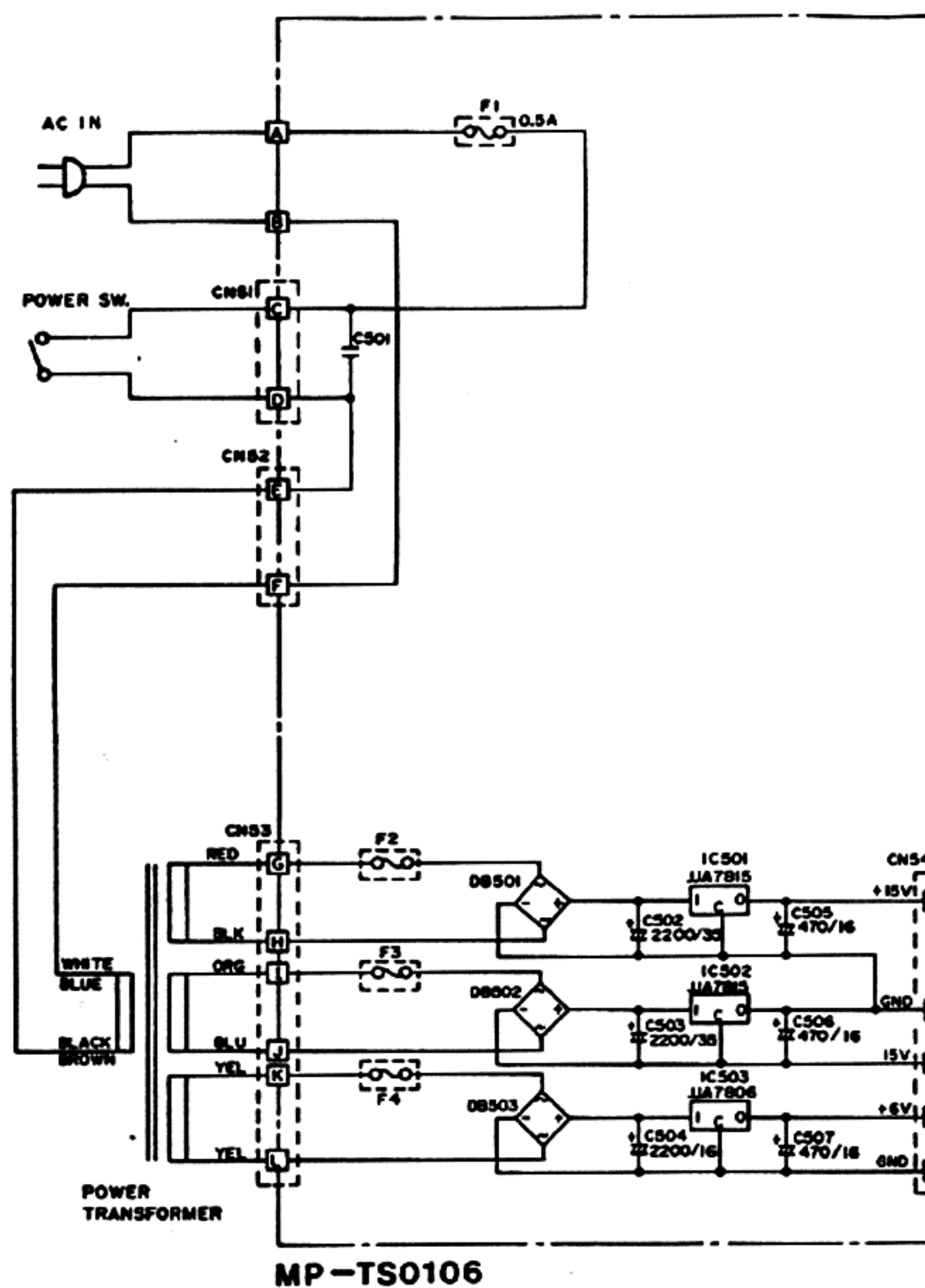


[NOTES]

▲: CERAMIC capacitor. All ceramic capacitors are above 25V rating.
■ FILM capacitor. All film capacitors are above 50V rating.
NP: NON POLAR capacitor.
T: TANTALUM capacitor.

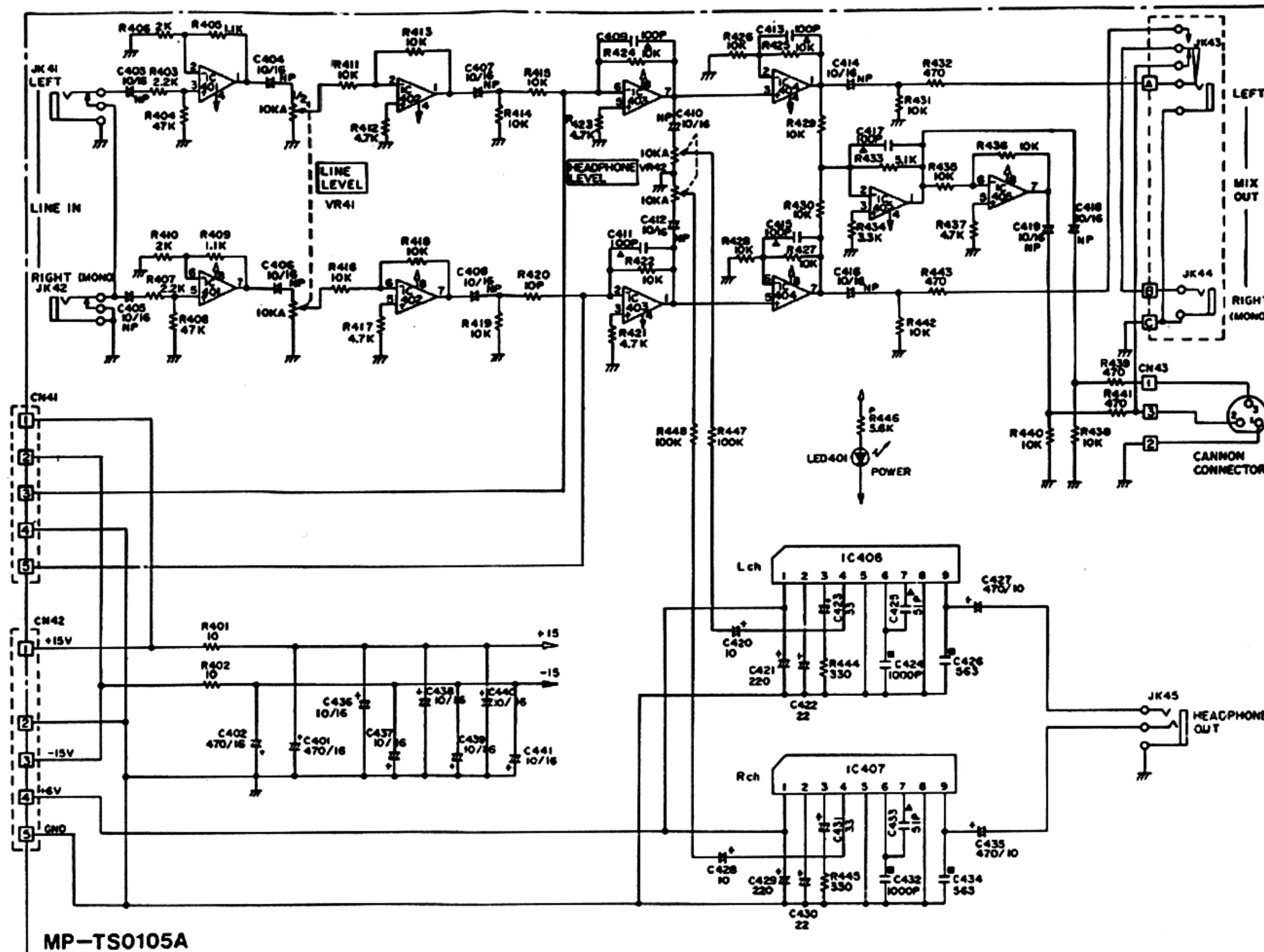
And all capacitors are ELECTROLYTIC capacitors, unless otherwise marked. Unless otherwise indicated:
Resistance in Ω , K= $K\Omega$, M= $M\Omega$
Resistors, 1/4W or 1/8W, $\pm 5\%$ rating
Capacitance in P=PF, μ = μF

POWER



MP-TS0106

MIX MODULE

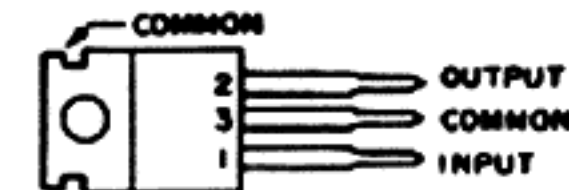


MP-TS0105A

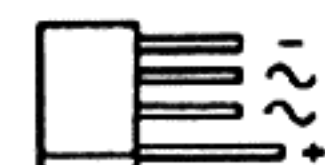
CAUTION : This schematic diagram is a normal standard one. The parts rating and/or schematic diagram will be changed without notice.

SIDE VIEW

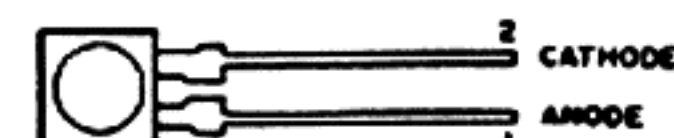
μA7806
μA7815



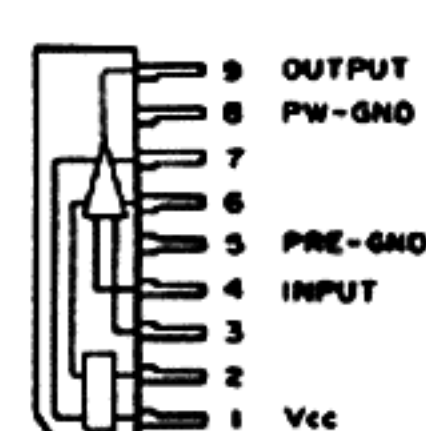
SV815



LN25

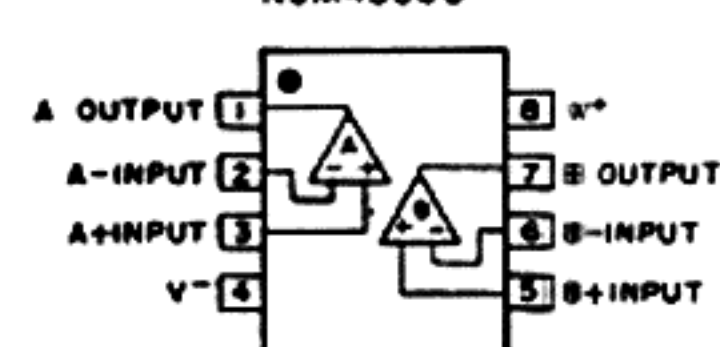


TA7336P



TOP VIEW

NJM4558D



[NOTES]

- ▲ CERAMIC capacitor. All ceramic capacitors are above 25V rating.
- FILM capacitor. All film capacitors are above 50V rating.
- NP: NON POLAR capacitor
- T: TANTALUM capacitor.

And all capacitors are ELECTROLYTIC capacitors, unless otherwise marked. Unless otherwise indicated: Resistance in Ω, K=KΩ, M=MΩ. Resistors, 1/4W or 1/8W, ±5% rating. Capacitance in P=PF, μ=μF.

IC401~405: NJM4558D
IC406, 407: TA7336P
IC501, 502: μA7815
IC503: μA7806
LED401: LN25RP
DB501~503: SV815

TS305 PARTS LIST

TYPE	AC[V]	NATION	AC.CORD	TRANS.	FUSE	FUSE HOLDER
M	100	JAPAN	0.75VFF	MT-TS0101	61M0.75	F-6-30
N	120	U.S.A.	KP11/SVT102C	MT-TS0102	61M1.0	F-6-30
T	120	CANADA	KP30/SVT103C	MT-TS0102	61M1.0	F-6-30
O	220	SWITZERLAND	KP419E/CTCE3	MT-TS0103	ES20500	F-6-20
R	240	U.K.	SP300/BS	MT-TS0103	ES20500	F-6-20
S	240	AUSTRALIA	KP550/LTSA3	MT-TS0103	ES20500	F-6-20
U	220	OTHER EUROPE	BB&721	MT-TS0103	ES20500	F-6-20
PARTS NAME	TYPE	PARTS No.	REF.No.	REMARKS		
MAIN CHASSIS		MS-TS0101		[		]
REAR PANEL		MS-TS0103A		[		]
BOTTOM COVER		MS-PX0402		[		]
RACK HOLDER	(x2)	MS-PX0403		[		]
POT.HOLDER A	(x6)	MS-TS0106		[		]
POT.HOLDER B	(x1)	MS-TS0107		[		]
JACK HOLDER A	(x6)	MS-TS0104		[		]
JACK HOLDER B	(x1)	MS-TS0105		[		]
SHIELD PLATE	(x1)	MS-TS0102		[		]
KNOB	(x36) White	MK-TS0101W		[		]
KNOB	(x13) Blue	MK-TS0101B		[		]
KNOB	(x7) Green	MK-TS0101G		[		]
XLR CONNECTOR	(x1)	XLB-3-32		[		]
POWER SWITCH		SDJ15		[		]
CONNECTOR ASSY.(F)		5196-03	250mmx2 (SU.)	[		]
P.C.B.SUPPORT	(x2)	LC85-06M		[		]
RUBBER LEG	(x4)	SK-15		[		]
AC CORD BUSHING		SR-SN-4		[		]
P.C.B. (POWER SUPPLY)		MP-TS0106		[		]
CONNECTOR (M)	(x2)	5277-03A	CN51,52 (SU.,P.T.)	[		]
CONNECTOR (M)	(x1)	5277-06A	CN53 (P.T.)	[		]
CONNECTOR (M)	(x1)	5267-05A	CN54 (LINE)	[		]
IC (+15V Reg,FC)	(x2)	UA7815	IC501,502	[		]
IC (+6V Reg,FC)	(x1)	UA7806	IC503	[		]
DIODE BRIDGE (SH)	(x3)	SUB15	DB501-503	[		]
P.C.B. (MIX & OUTPUT)		MP-TS0105A		[		]
JACK	(x2)	HLJ0520-01-110	JK41,42	[		]
JACK	(x2)	HLJ0605-01-100	JK43,44	[		]
JACK	(x1)	HLJ0317-01-020	JK45	[		]
CONNECTOR (M)	(x1)	5267-05A	CN41	[		]
CONNECTOR (M)	(x1)	5267-03A	CN43	[		]
CONNECTOR (F)	(x1)	5264-05	CN42	[		]
IC (Op.Amp,JRC)	(x5)	NJM4558D	IC401-405	[		]
IC (Amp,TO)	(x2)	TA7336P	IC406,407	[		]
LED	Red (x1)	LN25RP	LED401	[		]
VARIABLE R.	(x2) 2A10K	EUKENAB15A14	VR41,42 LTNE,HEAD.	[		]
P.C.B. (BASIC MODULE)		MP-TS0101A		[		]
This module is almost as same as TS306.						
Please refer to the parts list of TS306.						
INFORMATION : TS305 has five BASIC MODULE P.C.B.s which are SNARE,TOM1,TOM2, TOM3 and BASS. The parts of these P.C.B.s are almost the same except some resistors and capacitors. Please refer to the SCHEMATIC DIAGRAMS.						
P.C.B. (RIM SHOT MODULE)		MP-TS0104A		[		]
JACK	(x3)	HLJ0520-01-110	JK11-13	[		]
CONNECTOR (M)	(x1)	5267-05A	CN11	[		]
CONNECTOR ASSY.(F)	(x1)	5264-05	CN12	[		]
SWITCH	(x1)	HSUB411-01-090	SW11	[		]
IC (Op.Amp,JRC)	(x7)	NJM4558D	IC101-106,108	[		]
IC (Op.Amp,JRC)	(x1)	NJM13600D	IC107	[		]
DIODE (TO)	(x16)	1S1580	D101-116	[		]
LED	Red (x1)	LN25RP	LED101	[		]
TRANSISTOR (TO)	(x2)	2SA1015GR	Tr104,105	[		]
TRANSISTOR (TO)	(x3)	2SC1015BL	Tr101-103	[		]
FET (TO)	(x12)	2SK246GR	Q101-112	[		]
VARIABLE R.	(x1) 85K	EWH14A091B53	VR19 SENS	[		]
VARIABLE R.	(x2) B100K	EWH14A091B15	VR12,16 EMPH,TUNE	[		]
VARIABLE R.	(x4) A100K	EWH14A091A15	VR11,13,14,18 LEV,NOISE,TONE,ATT	[		]
VARIABLE R.	(x1) B500K	EWH14A091B55	VR17 DECAY	[		]
VARIABLE R.	(x1) B100K	EWH14A091B15	VR15 BEND	[		]
SEMI FIXED R.	(x5) 100K	RVF0W104	SR12-16	[		]
SEMI FIXED R.	(x1) 500K	RVF0W504	SR11	[		]